: Cunningham G-3 (1846-47) 1854 AJ4 W. Tibetans AJ4

721 to the Botis of the east, which will account for his
73 entering Kashmir by Gagangir on the Drás road, as related in the Raja Taringini.

712 The forts of Eastern Ladák were nearly all castellated
793 monasteries, the defence of which was intrusted to the
[701] unwarlike monks, assisted by a few of the armed peasantry, who performed the duty by turns, under the command of one who was dignified with the title of *Kharpon*, or governor.* In Western Ladák there were several castles belonging to petty chiefs, such as Paskyum and Soth, which were better calculated for defence. The
[312] monastic castles were mostly perched on high rocks quite destitute of water, and it was a part of the daily duty of the garrison to fetch water for the monks. Had any of these castles possessed a proper supply of water, their generally inaccessible positions would have rendered them safe against all common attacks. I have seen the monasteries of Hanlé, Hémis, Thigsé, Shé, Lé, Pitak, Phyang, Bazgo, Láma Yúrrú, Hesku, Kharbu, Thakshé, and Mulbil, as well as the ruined forts of Balukhar and Paskyum. The monasteries are all built on steep cliffs, more or less high, with stone walls coloured white and red, and surmounted with an endless number of small flags. They are generally difficult of access, and always picturesque. Perhaps the most remarkable is that of Thakshé, on the right bank of the Kánji river. It is perched on a lofty isolated cliff, bluff and overhanging on the north side, and with a precipitous slope of about 65° on the south side. The only ascent is by a very steep pathway.

* *mKhar-dPon*, "fort-chief." A fort is also called *rDsong*, and the governor *rDsong-dPon*. Every commandant of a castle, or military post, even if his garrison does not amount to more than four men, is dignified with the title of *Kharpon*.

1: Cunningham G-3 (1846-47) 1854 AJ4 W. Tibetans AJ4

chose the more humiliating alternative of actual surrender. Such was the fate of a country which might have been saved by a hundred resolute soldiers at the bridge of Khallach. But the indolent votaries of an almost worn-out faith were no match for the more active and energetic worshippers of Mahadeo and Párbati. 726

Under the government of Maharaja Guláb Sing, the country is held by a few garrisons of tolerably well-appointed infantry, who are quartered in the different forts erected by Zoráwar Sing and his successors. The forts that I have seen are those of Lé, Kargyil, and Drás, besides the bridge-head at Khallach. They are all built on the same kind of plan, and in similar situations on the banks of streams, that they might insure an unfailing supply of water, without which the strongest fort would be untenable. 712 [312]

The new fort at Lé is built upon the open plain, and on the edge of the Lé rivulet, at somewhat more than a mile to the south-west of the city. I saw it to great advantage on my visit, as the thanadar Basti Rám had kindly deputed his son to attend me. Everything, therefore, was prepared. The interior was trim and orderly; the guns were clean and bright; and the men were all dressed in respectable uniforms, which appeared too new to have been much worn. The walls are built of huge sun-dried bricks, and are nearly thirty feet in height. In the interior the barracks, as well as the store-rooms, are built against the walls all round, and their flat roofs form the terre-plein of the ramparts. Each room is furnished with a door. The guns are four brass three-pounders, all in good order, and well set up on substantial carriages. They are manned by thirty

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repeatedly mentioned by Bâber; but after his time it gradually became obsolete. It was introduced by the Musalman conquerors, and the very first king, Kutb-ud-din Aibak, was killed by a fall from his horse when playing at chaogan in A.D. 1210.* The Pathán kings of India still continued to join in the game down to the time of Sikander Lodi, in A.D. 1498, when "one day, while the king and his court were playing at chaogan, the bat of Haibat Khan Shirwani by accident came in contact with the head of Suliman, the son of Darya Khan Lodi, who received a severe blow. This was resented on the spot by Khizr Khan, the brother of Suliman, who, galloping up to Haibat Khan, struck him violently over the skull. In a few minutes both sides joined in the quarrel, and the field was in uproar and confusion. Mahmud Khan Lodi and Khan Khanan Lodi interposing, endeavoured to pacify Haibat Khan, and succeeded in persuading him to go home quietly with them. The king, apprehensive of conspiracy, retired immediately to the palace; but nothing more transpiring, he made another party at the same game a few days after."†

VII.—HOUSES—PUBLIC AND PRIVATE.

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[312] The finest buildings in Ladák are the monasteries, which are always placed on heights more or less lofty, and which generally have a very picturesque and imposing appearance. Many of them would be places of some strength if they possessed water; but I am not aware of a single monastery that has even one day's supply. The outer walls of the monastery are formed by

* Briggs's Ferishta, I. p. 199. † Idem, p. 574.

844 when he ran from village to village with an important message, no one could keep up with him. That was caused by the ibex dung.

854 Now the "little nest" (Tibetan: T'san-nu) is ready. Into it the little baby is placed, crying and kicking his feet; but he soon calms down when he and the other clean contents of the "little nest" have been put in the right position and he has become warm. He finds everything in his little nest that a Tibetan baby demands first in this world: a warm, soft bed and (Tibetan) cleanliness in his dry dung diaper-substitute; and soon he sleeps so long and deep as only a small Tibetan can sleep.

853 The child does not lack in food. The mother is a strong young woman; she can give her child the natural nourishment by which it flourishes like the numerous children of the mother sparrow that has its nest up in the roof; and she may give this food for at least the next two years, even long after the child is able to walk. This the mother does with an amazingly small amount of trouble and care on her part. Where should she find the time for regular baby care according to European conceptions? Even without this she has her share, and more than her share, of labor and trouble.

846 For his wife who is in lying-in the husband had for a long time kept a sheep ready. This sheep is killed on the day after the birth, and in the evening the young woman enjoys with great appetite a solid meal of meat and rice. What would our German doctors say to this?

312 The same evening, when it has become dark, Lobsang Wanggyal leaves his house. On a narrow path he goes around the village, occasionally looking around cautiously to see whether someone /17/ might be noticing him. He arrives at one of the watering ditches which conduct the water that is so valuable here in the upland valleys, from the glacial stream of the nearby gorge to the bottom of the valley for the irrigation of the fields. The man removes a few stones and pieces of turf from the low dam of the ditch and lets the water run into a branch of the ditch which now leads it to his clover fields 783 and to his orchard with the many apricot trees. While he is still 844 occupied with this, a rough voice calls out: "Lobsang Wanggyal, you impure one (Ba-nag-pa) (2) ! what are you doing with that ditch? You

2. Ba-nag-pa is the name for a person who, by touching the woman who is lying in, or by his mere presence in a house in which the birth took place, has become ritually unclean.

[868] observations and impressions are assimilated by the person and are
241 made to become fruitful in his own, independent actions. Drogpa Namgyal saw in the fields how his father coupled two dso (oxen, a cross between yak, oxen, and an ordinary cow) to a very primitive hook-plow. He saw how his father then plowed the stony field on which another man, who had been hired to help with the tilling of the field, had previously scattered the seed (wheat or barley). The seed was then plowed under. He saw how then his mother with the help of two women watered the field with the love and care with which one ordinarily treats a garden.

241 On the uneven floor of the valley, which in parts rises steeply,
•312 and on the slopes of the mountains the fields have been laid out with great skill in terraces, in order to even out inclines that are too steep. The watering of the fields attracted Drogpa Namgyal's special attention and aroused him to help with it. Only gradually did he find his way in the intricately ramified net of watering trenches which was spread over the entire bottom of the valley and even up to the foot of the slopes. These small trenches (yur-ba) are all fed from one main trench which receives the water of the brook high above in the side-valley. The brook brings this water from the distant snow field way
[42] up in the mountains. With the greatest of skill and with the simplest
[77] of tools--spades, pointed hoe and crow-bar /31/--the Tibetans have been setting up these water trenches for centuries. They probably learned this skill from the immigrant Aryans (compare note 12). The watering ditch is either dug into the available plot of ground wherever this is possible, or else an artificial channel is created from stones and sod, which is scantily sealed off by means of loamy soil. In this manner the channel is often built from four to five kilometers and more along barren, steep cliff faces. Here they often have to be propped up by walls and buttresses which are most laboriously built into the rock, whenever the precipitous side of the mountain offers no base of support. In the bottom of the valley the main trench then branches out into a large number of small ditches so that every, and even the most distant, piece of field can be irrigated

The mother, armed with a wooden shovel, conducted the water from one field terrace to the next until all were thoroughly irrigated so that the water stood on the plowed ground for a while and had time to penetrate into the soil parched by the singeing sun. Lobsang Wanggyal with his large holdings of land was allowed to use the water of the channel for a whole day; after him there came on

the next day three small farmers who all had to finish with the watering of their fields in one day. 241 3120

The farmer in the mountainous wastes of Ladakh and Tibet where there is little rainfall it is totally dependent upon artificial methods of irrigation, for in the summer it often does not rain for weeks, yes, even for months. For this reason water is a very valuable commodity to the mountain inhabitant, the just distribution of which he jealously watches over; also, since time immemorial strict laws regulate the construction, maintenance, and use of the communal village pipeline. Every owner of a field, depending on the size of his property, must supply one or more persons for the communal work on this pipeline, just as the length of time that he can use it is made to correspond to the size of the surface to be watered. Most water channels require considerable mending work year after year, since snow and mud avalanches often... large parts /there appears to be at least one line missing here in the original text, the preceding sentence being unfinished and the paragraph ending with the final part of another sentence:--translator./... all had to be ready with the watering in one day. /The latter is simply a repetition of the last line of the previous paragraph. --translator./ [476]

When the grain is about a span high the fields are weeded with the care with which a gardener clears his cabbage patch of weeds. When the wheat is ripened it is not mowed with the blunt /32/ sickle but is plucked out roots and all. The left hand grasps a bundle of stalks and the sickle in the right hand, which really acts more like a hook than like a cutting implement, plucks out the stalks. On the average the field holdings are very small and the harvest yield is scant in the high mountain areas, so that every inch of stalk is valuable as straw, as feed--not as litter--for the cattle. As a result the Tibetan farmer cannot afford to leave the stubbles standing. After the grain has been bound together in small sheaves and has been laid in rows on the field, in order to ripen fully after it has been gathered, it must be guarded against thieves; one of the men must "watch" among the sheaves at night; that is to say, he must sleep there, on the assumption that he will wake up at the slightest sound. 241 [412]

Among all peoples of the East threshing is done by cattle. Six to nine animals, oxen, cows, horses, and donkeys, often in variegated order, are tied together to a rope at short distances from each other. One end of the rope is fastened by a sling to a post which is planted in the middle of the circular threshing-floor. The threshing-floor is

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

lakes in this country, two on the Bhága and one on the Chandra near the Pálamo pass. This last is much the largest, being three quarters of a mile or more long. The water in all is fresh and very clear. In this vast region of alps and ice, it will be readily understood that habitable spots and cultivated fields are few and far between. They are found only in the lower valleys of the Chandra and Bhága, the remainder of the canton being desolate and completely uninhabited, save when, for a few weeks in summer, the Kúlu shepherds bring up their flocks for pasturage. The inhabited part of the Chandra valley is called by Láhaulis Rangloi, that of the Bhága, Gárá, and that of the Chandra-Bhága, Pattan.

The scenery in Láhaul is almost oppressive from its grandeur, and it is wild and desolate, for the villages and cultivated lands are mere specks on these vast mountain slopes. But there is something pretty and smiling about the near view of the villages, especially in Pattan and the lower part of Gárá. There is nothing striking in the flat-roofed two-storeyed houses, which are massed together in one or two blocks, so as to give in-door communication in winter; but the clumps of pollard willows standing in plots of smooth green turf, and the terraced fields neatly kept and waving with thick crops of wheat or barley, are pleasant to look at. On the banks of the fields and under the small canals are the *dang* or hay fields, in which the grass grows luxuriantly, mixed with bright flowers as in an English meadow, and here and there in bush or hedge are wild roses, bright crimson or bright yellow, and wild currant or gooseberry trees. Wherever water is brought, all this verdure springs up, but without irrigation the ground is so nearly barren that not only no crop will grow, but there is so little grass that at a short distance you would think there was no green thing on it. This description, however, does not apply to the upper villages in Gárá and the greater part of Rangloi, where there are few or no trees or bushes round the villages which have a very bleak look, but the grass grows thick and green on the hills without irrigation. In a few places the slopes immediately above the villages are thinly covered with *kail* (*Pinus excelsa*) or pencil cedar (*Juniper excelsa*) and higher up, here and there, there are patches of birch wood. Near the villages on the road-sides are long dykes or walls of stone from four to five feet high and a yard or more broad, on the top of which are placed slabs or round stones, on which the *ommái pádme hún* and other Buddhist texts or *mantras* are inscribed. *Chodhten* or *Dangten*, which are curiously-shaped conical-buildings erected in honour of some saint or incarnation or as the mausoleum or relic temple of some *lámá* or great man, are found in the same situations. Above the villages, sometimes on the hillside and often under the shade or on the very face of a precipice, are seen the *gonpas* or monasteries of the *lámás* with flags flying and whitewashed walls. The average elevation of the cultivated and inhabited portion of Láhaul is estimated by General Cunningham at over 11,000 feet. Mr. Lyall, on the other hand, puts it at something less than 10,000. The highest villages are in the lower part of the valley of the Bhága, where one, named Kangser, is mentioned by Mr. Lyall at an elevation

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

133 Chapter I. The District. Rivers.

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It[1] joins the Spiti after a course of 45 miles a short distance above Dankar, the principal village of the valley. The width of its bed near its mouth varies from 300 to 800 yards. The greater part of its course is through an uninhabited country, its valley forming no exception to the description given of the other streams which join the Spiti from the south and west. Near the mouth of the valley, however, the country opens, and affords space for cultivation. Here there are eleven villages, the only inhabited spots, not in the valley of the main river itself, in the southern half of Spiti.

312 133 Character of the Rivers: Bridges.

Running in deep courses, the sides of which are steep and friable, the water of the Spiti rivers is valueless for purposes of irrigation; and although artificial watering is a necessary condition for the production of a crop, and a plentiful supply of water, most plentiful in the hottest season, passes at his feet, the cultivator has to be content with the meagre supply obtainable from streamlets having their rise in the smaller ravines, some of which run low, or dry completely up before the close of the summer months. The water of the rivers, heavily charged with silt, is turbid and yellow in appearance. The flow is seldom deep, being distributed over broad courses, and often broken up into independent channels. The current, however, is sufficiently rapid to render fording, where not quite impossible, a matter of difficulty and danger; and when the streams are full, the ominus sound may be heard of rolling boulders knocking one against the other. Bridges, on the other hand, are rare, and cannot in any case, except that of the new *sangha* bridge at Rangrig over the Spiti river, be passed by the *yaks* or ponies with which most Spiti men travel. The people therefore are compelled to ford, and lives are frequently lost in consequence. At two points, above Kája and below Lithong, where the main stream is suddenly collected into a narrow channel by ridges of rock, *sanga* bridges have been erected for foot traffic, but the biggest timber in Spiti is too light for the construction of a bridge passable by *yaks* or ponies. Below Máni the river runs in a narrow channel and is crossed in three places by *jhilá* bridges.

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361 Villages and scenery in Spiti.

On the Spiti the first inhabited spot is Losar twelve miles from the Kanzam pass. From this point downwards villages are frequent, occupying every available corner in the valleys, both of the main streams and of its tributaries from the north. A traveller passing down the Spiti valley would never suspect the existence of villages in these lateral valleys, for the streams which drain them run in deep canons or chasms with precipitous sides cut in the rock, and nothing can be seen but the mouths of these gorges from the main valley. Major Hay, in his account of Spiti, says that the soil is composed of lime and sandstone. It is evident that a river very easily cuts itself a deep channel in this formation, which is only hard so long as it keeps dry; and as very little rain falls, and the snow melts gently, the banks of the cutting remain very perpendicular. Curious examples of this quality of the soil are seen in many places, where the ground has melted away round certain points protected by slabs of slate or shale, leaving the slab high in the air supported by fantastic pillars or arches of the softer formation. One bad result of this peculiarity is that though water for irrigation

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[1] i.e., the Pín, a tributary of the Spiti river.—ANALYST.]

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Villages and scenery in Spiti.

is the great want in Spiti, yet the river itself and its tributaries, fed from immense glaciers, and at their fullest in the hottest weather, supply none; their beds are too deep, and their sides are too steep and friable, so that the *samíndár's* only resource is in the water of small streamlets which flow from small ravines in the face of the mountains which shut in the main valley. Some of these dry up altogether, and others run very low towards the end of the summer. The main valley looks as if it had consisted originally of a level plain from a mile to two miles wide, but the greater part of this plain has been carried away by the river which now runs in rapid shallow streams scattered over a very broad bed shut in by steep cliffs; the remains of the plain form plateaus above the cliffs, and it is on these plateaus that the villages stand. From the plateaus the mountains rise up in long steep smooth slopes of *débris*, till near the top, rocks rise out of the slope in the shape of walls or jagged ridges, and end the view. The plateaus and slopes of *débris* look brown and bare; and the rocks are of all colours, shades of red and yellow predominating. There are no trees, and to get sight of green grass you must go up into the high lands on the left bank already mentioned. All available water seems to be carefully reserved for the fields, and there are no *dang* or irrigated hay-fields as in Láhaul. In place of hay a kind of thistle and a vetch, which grow wild in the valleys, are cut and stored for winter fodder. At the head of the valley there is a kind of bush willow which grows in the bed of the river, and lower down a prickly shrub (*Hippofa salicifolia*) is common in the same position, but they are neither big enough nor green enough to alter the prevailing barren tints of the scenery. At the lower end of the valley a few *shokpa* (*Juniperus excelsa*) and poplar and willow trees are to be seen. These, with the exception of a kind of dwarf birch which is found in one or two places, furze, broom, wild rose, and currant bushes, comprise all the trees and shrubs of the country. The Pín valley is more absolutely bare of tree or bush than any other part of Spiti, but there is more grass than in the main valley, which is probably due to a greater rainfall. In spite of the utter want of verdure, there is a great deal of beauty in the scenery; the hills near at hand have very quaint and picturesque outlines, and their scarped sides show a strange variety of strata, each with a different tint of colour; above them a glimpse is caught of some snowy peak standing back against a very blue sky; in front are the bold sweeps of the river and the cliffs, supporting the plateaus, upon which, at long distances, the white houses and green fields of the villages are conspicuous. All this, seen through an excessively clear and pure atmosphere, makes as pretty a picture as is possible in the absence of verdure and blue water. The only blue water in Spiti is contained in one or two lakes, to see which requires a long climb out of the valley; there is a small one above Dankar, and another of considerable size at the foot of the Mánirang pass. The water in the rivers is always thick and yellow, an unusual thing in the Himalayas, and due of course to the

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CHAPTER III.

THE PEOPLE.

SECTION A.—STATISTICAL.

161 Chapter III, A. Statistical.

Distribution of population.

The general distribution of population is discussed in Part I (page 52 *et seq.*) The population is naturally exceedingly sparse, being only 2·6 souls per square mile in Láhaul and 1·3 in Spiti. But in the former there are over 1,200 and in the latter about 1,000 souls to each square mile of cultivation. In Spiti we have a smaller number of souls per house and family than is recorded for any other portion of the Punjáb. The quotation from Mr. Anderson at page 21 explains the reason, and describes the constitution of the family in this wild Tibetan valley.

Increase and decrease of population.

[167]

The figures for successive enumerations are given in Part I (page 54). Mr. Lyall is of opinion that the huge increase shown in the population of Láhaul between 1855 and 1868 is due to more careful enumeration; though he remarks that there can be no doubt that the population did increase considerably by natural growth; and in a small degree by immigration from Zánskár and other countries to the north-west. With respect to Spiti, he there also attributes the great increase "mainly to better enumeration; for the population increases very slowly owing to the family arrangements which I have described, and the number of immigrants from Tibet has been inconsiderable." The increase since 1868 is thus discussed by Mr. Anderson:—

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"In spite of these figures I am of opinion that there has been considerable increase of population in Láhaul. The Census of 1868 was taken after the pass leading from Kúlu to Láhaul was open, and so far as I am aware, no attempt was made to prevent double enumeration. The number given by the Census of 1881 shows the population that spent the winter in Láhaul. The number of Láhaulis in Kúlu in winter was great, and there were probably a good many in Simla also. Their presence in Lág Mahárája and Sahri accounts in part for the great increase in these *wazírís*. Láhaul has been very prosperous in trade, and generally prosperous in cultivation. Cultivation cannot extend much, as without irrigation there is no crop, but this has not much effect, as food is cheap in Kúlu and the Láhaulis are great carriers. The missionaries at Keylang have told me that they know that large sums of money are brought into Láhaul, though in outward appearances the people do not show much improvement. I think that probably the increase in Láhaul has been equal to that of Kulu.

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"The population of Spiti in 1868 was 1,511 men and 1,513 women, total 3,024, and now it is shown as 1,358 men and 1,504 women, total 2,862. The decrease of 162 is almost entirely among the males, and this is in part due to the exclusion from enumeration of the males who were in Kúlu or on pilgrimage to Ráwalsir, &c. Women also leave Spiti, but not in such numbers as men. The population has probably not increased much, if any. The streams are cutting out lower beds for themselves, and land once irri-

GATED AND THEREFORE CULTIVATED IS NOW LYING WASTE. P. 94

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two *lámás* and two drums, some of the company carrying at the same time several large religious books on their backs; this done, the whole company sits down in the fields near the villages, and feasts on cakes and *cháng* supplied jointly by all the landholders. All this is done to secure the sprouting up of the seeds sown; after that the water-course for irrigating the fields is repaired, on which occasion a sheep is offered up to the *lhá* which is supposed to have special care of the water-course. Again, as soon as the seeds have sprouted, another ceremony is performed; this consists in sticking small branches of the pencil cedar here and there in the field, and burning incense, while some members of the family sit down, eat and drink a little, and murmur some prayers. This is to ensure that each grain which has sprung up may prosper and produce many ears. When the fields are nearly ripe, a goat or sheep is killed in honour of the *lhá*; in several villages horse-races are held at the same time. Till this festival of the ripening grain has been celebrated, nobody is allowed to cut grass or any green thing with a sickle made of iron, as in such case the field-god would become angry and send frost to destroy or injure the harvest. If, therefore, a Láhauli wants grass before the harvest sacrifice, he must cut it with sickle made of the horn of an ox or sheep, or tear it off with the hand. Infractions of this rule were formerly severely punished; at present a fine of one or two rupees suffices, which goes into the pocket of the *jágírdár* or village headman. The iron sickle is used as soon as the harvest has been declared to be commenced by the performance of the sacrifice. The above description applies particularly to the ceremonies in use among the pure Buddhists of Láhaul, but somewhat similar rural customs prevail also amongst the half-Buddhists and among the people of Spiti.

Chapter III, B. — Social and Religious Life. — Religious ceremonies connected with agriculture.

One of the most peculiar features of the *lámáic* system is the hierarchy from which it takes its name. The teaching of Buddha included an elaborate monastic system, but no priests, for there was no god to worship or ceremonies to perform, and no hierarchy, for all men were equal. And till about A. D. 1400 the *lámás* or monks of Tibet recognised no supreme head of the faith. But about that time the abbot of the Gáhldán monastery proclaimed himself the patriarch of the whole *lámáic* priesthood, and his successor, of the Tashi monastery, declared the grand *lámás* to be the perpetual re-incarnations of one of the Bodhisatwas or semi-Buddhas, who, as each *lámá* died, was born again in the person of an infant that might be known by the possession of certain divine marks. The fifth in succession founded the hierarchy of Dalai *lámás* at Lhásá in 1640, and made himself master of the whole of Tibet. He assumed the title of Dalai *lámá*, while the *lámá* of Tashi still continued to enjoy his former privileges; and thus we now have two great chairs filled by a double series of incarnations. There is a also third great *lámá* in Bhutan, known among the Bhutanis as the Dharma Rája, but among the Tibetans as Lord of the World. Below these three great *lámás* come the ordinary monks, who live for the most part in monasteries ruled by abbots whose only claim to precedence one over another is derived from the importance of the institution over which they preside, or from the

The *lámáic* system.

[See also preceding page, cat. 116 - Analyst]

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room for further extension of cultivation was left,* the assessment or rating on each house or *jeola* became fixed hard and fast; no one in authority took the trouble to revise it, though of course, as time went on, the proportions of the holdings did not remain exactly the same. Some fields were increased by gradual encroachment on the waste, and a few others changed hands. Sale of land was unknown, or the changes would have been greater.

Original form of holdings of fields (Láhaul).

The only known instances where land has been sold are the fields on which the Moravian Mission house is established. Mr. Lyall writes:—

"There is a custom of leasing fields for one or two harvests for a sum in cash down, which in the language of the country is described as a sale, and this peculiarity of idiom at last Settlement led to the belief that a custom of sale prevailed in Láhaul, though not in any other part of the district. Usufructuary mortgages are not uncommon. I did not come across any instance of a *chákri* or *kéng chumpá* having mortgaged his holding; but the general opinion of the Thákurs and others whom I consulted was that he could not be prevented from so doing, provided that the mortgagee must pay full rent unless he or the mortgagor performed the customary service."

In Láhaul there are in all 1,085 *jeolas* or holdings, the areas of which vary with the status of the holder. The average area is, for a Bráhman, three acres, for a Thákur or Dotoen eight acres, for a Kanet or Tibetan 4½ acres, for Dágis and other low castes 1½ acres.

Rights of the Thákurs and subordinate landholders of all kinds in *jágír kothís* in Láhaul.

The *jágír kothís* in Láhaul are three in number—Kolong (or Todpa) held by Thákur Hari Chand; Ghumrang, held by Moti Ram; and Ghondla, held by Hira Chand. Of this last-named *kothí* a half was described in former Settlement papers as resumed; one of the last Rájas of Kúlu did in fact resume half, but practically the whole remained undividedly in possession of the Thákur, who accounted to the Rája for half his collections of all kinds. After Regular Settlement he continued in the same way to exact the old dues and services from all the landholders, and to pay the Government the land-revenue for half the *kothí*, plus *nazarána* on account of the other half. The whole of his payments may be considered to have been of the nature of *nazarána*. The nature of the holdings of arable lands in the *jágír kothís* is as follows:—The whole produce of certain fields is taken by the Thákur; this land is cultivated by farm servants, assisted on certain occasions by gatherings of the regular landholders; it is known as the Thákur's *garhpán* or home farm, and, as a general rule, the greater part of it is situated in villages near which he lives. Other fields are held rent-free as maintenance by his *dotoen*, *i.e.*, by the *dunnewassals*, or junior branches of his family or rent-free in lieu of continuous service by his *chákris* or family retainers, or by his *kéng chumpá* or farm servants.

The great bulk of the fields, however, form the *jeolas* or holdings of the *yulfa* or villagers, which are held subject to payments of *tal*, *i.e.*, rent or revenue, the performance when required of *begár*

* There is of course any amount of waste land in Láhaul, but no cultivation is possible without irrigation; and the land so situated that it can be irrigated by existing channels, or channels easily to be made, has long been fully occupied in the lower and less inclement parts of the country.

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

There are

certain patches of waste land known as *dang piri*, which are like the cultivated fields, the property of individuals, and included in their holdings; they are situated below the water channels or on the sides of the fields, and, with the help of irrigation, produce abundant crops of hay. The rest of the waste must be held to be the property of the Thákur, subject to the rights of use belonging by custom to the subordinate landholders.

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Detail of rents and services at which the subordinate landholders hold their fields of the Thákur of Ghumrang.

The best way to describe the nature of the rents and services rendered to the Thákurs by the subordinate landholders will be to give a detail of them as they exist in one *jágír*. For example, *kothi* Ghumrang contains 58 *yulfa jeolas*, or full-sized villager's holdings, 24 full-sized holdings of *chákrís* or retainers, and eight of *káng chumpás* or farm servants. The rent paid by the peasant proprietors on a full *jeola* or holding consists of the following items:—

No.	Name of item.	Rate per *jeola*.	Remarks.
1	Old cash assessment ...	4-8-0	On fourteen *jeolas* Rs. 5 are taken.
2	Grain (*sattái*)	3 *láhi* 3 *páli* of barley	Three *jeolas* pay 6, and three pay 4 *láhi*.
3	Phari (cloth)	1 Phari or eight annas in cash.	Cash now always taken.
4	Suri (lit. Bribes) ...	From Re. 0-4 to 2-8.	
5	Betangna	Re. 2 cash.	

The last item was put on by the Thákur at the Regular Settlement; the other items are all of old standing.

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The following is a list of the periodical services rendered to the Thákur by the men of this same class according to the custom of the manor of Ghumrang;—

(1) On certain days, known as *bésti* days, each *jeola* has to furnish one man to work on the Thákur's *garhpán* land. The Thákur supplies food and drink, but no pay. There are eleven *besti* days in the year, but two, the sowing and the mowing days, are distinguished as the big *bestis*; on them a man for each *jeola* attends, on the other nine only some fifteen or sixteen men who live handy actually attend; the others remain at home, and pay the Thákur annually, in lieu of attendance, the sum of one rupee under the name of *besti* money.

(2). Each *jeola* is bound to stable and feed, for the six months of the winter, one of the Thákur's horses; one horse to a *jeola* is allowed to be the old standard; but as the Thákur has not so many horses, it has been customary for two *jeolas* to divide between them the care and charges of one horse.

(3). Each *jeola* is bound to convey once in the year eight or nine *páth* or about sixteen pounds of rice (a light goat or sheep load) from the Kúlu valley to the Thákur's house in Láhaul.

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

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The Thákur takes the *chatrá* or colts from landholders of every class: the custom is that when a mare foals, and her master sees that he is not the lucky owner of a filly, he at once takes both mare and colt to the Thákur's house; there he is presented with a new cap as a mark of favour, and leaves his mare to be kept for six months at the Thákurs expense. The nature of the holdings, and of the rents and services paid to the Thákurs, are the same in all the *jágírs*; there are differences of detail, but they do not require to be mentioned.

Land held by the Gúrú Ghantál monastery.

The big monastery of Gúrú Ghantál, with its chapels of ease at Koksar and Sansa, holds a good deal of land in different *kothís* rent-free as endowment. More than half is held of the *gonpa* by *káng chumpá* tenants, who by way of rent only present annually some shoulders of mutton, pots of whisky, and plaited sandals; but are bound to perform certain fixed services, such as the cultivation of the rest of the monastery land, the sweeping of snow off the roof of the monastery in winter, the bringing in so many faggots for winter fuel, &c.

Rights retained by the quondam Thákur of Birbogi.

There is a family in Birbogí which at one time were Thákurs of the *kothí*, and are not yet entirely out of possession. The present head is named Tángan Choigyál, an old man of eighty; his son is *lambardár* of the *kothí*; their manor house (now in ruins) is a very conspicuous object in the landscape, as most of these Thákurs' houses are. The family was in full possession till about the beginning of this century, when Rája Bikrámá Singh of Kúlu picked a quarrel with the then Thákur, and resumed the cash, cloth, and colts out of the items of revenue, leaving him only the grain item as a means of subsistence. This arrangement remained in force, though there is nothing to show that any Sikh or British official was aware of it, till about ten years ago, when grain having risen in price, the landholders, by agreement with the head of the family, converted the grain dues into cash, which has since been paid by each *jeola* in the proportions in which the grain used to be paid.* Each, moreover, continues to furnish a man for the two great *bestis*, that is, for sowing the barley and cutting the hay on the fields owned by the quondam Thákur. These fields were also in great part excused from bearing their share of the revenue of the *kothí* by the other landholders when they distributed it at Regular Settlement. This is all that remains to the present head of the family of its former privileges. He seems to be entitled to a position not unlike that of a *talúkdár* of a village in the plains.

Rights in water in Láhaul.

The small canals upon which cultivation in Láhaul depends seem to have been always constructed and kept in repair entirely by the landholders of the villages which use them. They are considered therefore to be the property of the shareholders in the water, who cast lots every year to decide the rotation in which each man shall irrigate his fields. Each holding furnishes a man for repairs; fines are levied on absentees, and consumed in a common feast with the produce of the *yurzing* or canal field, if there is one. The

* By each *jeola*, excepting those held by two families of *dojoes*, or kinsmen of the Thákur.

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

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general opinion is that no outsider can get a share of the water of a canal, except from the body of old shareholders. The State in a *Khálsa kothí*, or the Thákur in a *jágír kothí* could not give a share; practically, therefore, their power of approvement of the waste is limited unless a new canal can be made.

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Begár or forced labour demandable from landholders in Láhaul.

Mr. Barnes describes the system of forced labour or *begár* prevailing everywhere in the hills, and mentions that it is one of the conditions of the tenure by which all proprietors hold land of the State in the hills. The forced labour which falls upon the Láhaulís is peculiarly heavy, as their country is a highway used by many travellers and officials on tour, and is surrounded by high snowy mountains and large tracts of elevated waste. The demand all occurs within the six months of summer, the time within which all field-work and all trading journeys have to be done. It is distributed equally on each *jeola* or holding, but at times it may be ruinous to certain families to have to give perhaps their only man; or there may be none at home, all being away engaged in the carrying trade between Tibet and Kúlu, in which almost all Láhauli landholders are concerned. The arrangements which have grown up owing to these difficulties, and which have now become fixed institutions, deserve to be briefly described. For the periodical repairs of roads a man is demanded from every house; for the carriage of travellers' baggage a man is taken from every *jeola*, or full allotment of land only, and the demand for supplies of all kinds required for travellers is distributed in the same way. Each *kothá* or group of *kothís* repairs certain lengths of highway, and carries baggage, and furnishes supplies for the stage nearest to it to travellers merely moving about the valley. The four *kothís* of Rangloi unite to undertake the carriage from Láhaul over the Rhotang Pass into Kúlu. There remains the most difficult task of all, that is, the providing supplies and carriage to travellers wishing to leave Láhaul for Ladákh, Spiti, Zánskár or Chamba by the Bará Lachá, Shinkál or Kukti Passes, which are all over 16,000 feet in height, and involve a camping out for several nights in the wastes. For the work of these passes the ten *kothís* of Gára and Pattan have put themselves on a common roll or roster. Each *kothí* keeps an account with the other *kothís* of its contributions, and within each *kothí* each holding keeps an account with the other holdings. If a holding cannot furnish its man in its turn, a substitute is sent, and there are fixed sums which the defaulting holding is obliged to pay to the substitute (in addition to the pay which he gets from the travellers), as follows:—

Name of route.	Sum payable to the substitute.
To Rupshú, over the Bára Lácha	Three rupees cash, 70lbs barley meal, 1 pair boots, butter 2lbs.
To Spiti, over the Bára Lácha ...	Rupees 2 cash, 36lbs barley meal, 1 pair boots, butter 2lbs.
To Zánskár, over the Shinkál ...	Rupees 2 cash, 32lbs barley meal, 1 pair boots, 2lbs butter.
To Chambá, over the Kukti ...	Rupees 2 cash, 32lbs barley meal, 3 pairs plaited straw sandals.

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

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The demand by travellers for pack horses over the Bára Lácha and Shinkál is in the same way borne rateably by the ten *kothís*, and within the *kothís* by the different holdings. The defaulting *kothí* or landowner pays the owner of the substitute pony a considerable sum in cash at rates fixed for the different journeys.* Defalcations are numerous and the accounts therefore perplexing. It is the custom, therefore, for each *kothí* to appoint by vote an elder to represent the *kothí* in the committee of *begár* accounts. He is called the *siyáná* and gets Rs. 6 cash per annum from the common account, and is himself excused all *begár*. To collect and store supplies in readiness for travellers, and to keep the account of the store, two men are selected year by year in each *kothí* under the name of *talabdár*. They get no pay, but are excused their turn of the *begár* while in office. The above regulations apply to the regular landholders; they appear to have been made by the people themselves under general pressure put upon them by the authorities. In Pattan there are some Dágí families who hold *chetís* or small allotments of land rent-free from the State, on condition of stacking wood at certain halting places.

Begár or forced labour demandable from landholders in Láhaul.

There are five *kothís* in Spiti—Todpá, Barjik, Shám, Churí and Pín; the four first are in the main valley, the fifth includes the whole valley of the Pín river, and is shut off from the rest of Spiti by high mountains, except where the river forces its way through a deep narrow gorge to join the main stream. The name Todpá means head of the valley, Barjik the centre, and Shám the lower end, and these *kothís* divide the main valley between them accordingly. The name Churí implies endowment or assignment to religious uses, and the *kothí* consists of the villages scattered here and there over the whole length of valley. Again, in a few cases, different holdings in the same village belong to different *kothís*. It is hardly necessary to add that there are no boundaries between *kothis* in the waste, except perhaps in the case of Pín. A kind of boundary will be found to exist between villages which are not separated by any large expanse of waste; that is, such villages have loosely recognized limits within which both exercise separately the right of grazing cattle or cutting grass and wood; but even where such limits are clearest, they do not imply a full property of the soil. The right of the State to grant new holdings in such waste, if it could give water by making a new canal, would not be disputed; and where the villages, as is often the case, are far apart, there are no boundaries between them of any kind.

Sub-divisions in Spiti, and nature of town-ship and villages.

The form of tenure of the fields attached to the villages is the same as in Láhaul. Each field belongs to a separate estate or house, and with other fields forms its allotment supposed to have been originally conferred by the States and to be now independently held of it.† Owing to the custom of primogeniture which prevails these allotments are never sub-divided. The water available for irrigation

Form of holding of fields and nature of tenure of waste and arable lands.

* Of the ten *kothis* two have no ponies, being on the south side of the Chandra, so they of course default each time.

† *Zing kom* is a local word used to describe such an allotment. A *zing kom chongpá* or full allotment, varies from three to seven acres in extent according to quality of the soil. Some few families only hold a half allotment or *zing khom fitka*.

6: Gazetteer G-5 (ca. 1840-1883) 1883-4 AJ4 W. Tibetans AJ4

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has for long past been all used up, and the present holdings are therefore all of old standing. There are no Thákurs, in Spiti. The Gialpo or sovereign of Ladákh was the lord from whom in theory all held. The general rights of the State and the landholders in both waste and arable lands are the same as in the *Khálsa kothís* of Láhaul. There are 296 *jeolas* in Spiti, with an average area of about 5 acres. There are no *dang piri* or irrigated grass fields, as in Láhaul. All the men of the village graze and cut grass in common. A kind of thistle and wild gram or chick-pea are cut and stored for winter use.

425 Right of sale and mortgage.

No instance can be quoted of a landholder having sold the whole or a large part of his holding; but the custom of selling small portions is said to be ancient. The general idea seems to be that no one could question the validity of the sale of a whole holding, except the son or next heir. Two kinds of mortgage are in vogue. By one

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the land is made over to the mortgagee in lieu of interest till payment of the principal; in the other it is made over for a fixed term, on the calculation that the debt to the mortgagee will be liquidated in full within that time by the produce. The mortgagee ploughs, sows, and reaps, but the mortgagor manages the irrigation, and gets the straw for his trouble. Such a thing as an absolute gift of land appears to be unknown, and the general opinion seems to be that no man can give away land to the prejudice of his children, or that if he did do so, the gift ought to be treated as invalid unless they had grievously misbehaved. It seems the

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general opinion that in future a man ought to be allowed to give away his estate in the absence of any children or brothers or near kinsmen. Formerly the State would have interfered and put forward a claim. It is even now allowed that, in default of heirs or gift, the estate would lapse to the State; but our Government has hitherto not looked after its rights in this respect, and one or two instances have occurred of such estates being appropriated in late years by the landholders of the village and granted by them to some new man for a sum of money down, which they divided among themselves.

423 592 Distribution of fields comprised in an ordinary holding or household allotment in Spiti.

The great mass of the arable land consists of the holdings of the *talfás* or revenue-payers, which are each separate estates of the nature of household allotments. Within these estates the following occupants may be found:—Firstly, in each there is the *káng chimpá* (great house) or head of the family, who is primarily responsible for the revenue, the *begár* or forced labour, and the share of common expenses demandable on the whole holding. He is the

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eldest son, for primogeniture prevails, but it does not follow that his father must be dead, for by custom of the country the father retires from the headship of the family when his eldest son is of full age and has taken unto himself a wife. There are cases in

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which father and son agree to live on together in one house, but they are very rare. On each estate there is a kind of dower house with a plot of land attached, to which the father in these cases retires. When installed there, he is called the *káng chungpá* (small

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houseman). The amount of land attached differs on different estates; where it is big, the *káng chungpá* pays a sum of cash, or cash and

13: Heber and Heber D-8 (1914-25) 1926 AJ4 W. Tibetans AJ4

136 migrants appear. First of all the Wagtails come (Hodgson's pied ; grey and yellow-headed), making the streams and rivulets bright with their graceful movements and undulating flight, soon to be followed by the Siberian Chiffchaff, with his monotonous " cheep, cheep, cheep, cheep," The common Redstart, too, is here now, whilst the Hoopoo calls his " Ooppooppoopp " (the Ladaki name for him) to the farmer, giving him permission to sow his fields, unafraid of serious harm to his crops from further cold. The Cuckoo, too, makes his song heard occasionally about this time, and now one can notice the Western Blue Rock Thrush, whose coat really does look a beautiful slaty blue as he sits in the sun. Above the river, Gulls and Tern wheel and sweep, and are kept company by Swift and Martin ; on the stones by its side, the Ibisbill finds his food, whilst the royal Heron meditates solemnly by the water's edge with his neck well tucked in. So we can boast of a varied ornithology, full of interest and change.

132 We have already made so many references to climate and altitude that the reader will have gathered a fair idea of both. The extremes of the climate may be summed up in the oft-told saying that if you sit in the shade of a rock, the part of your body within the shadow freezes, while that in the sunshine boils ! The heat of summer out in the desert is intense, for the long stretches of sand and the barren glaring rocks seem both to soak up sunshine and reflect it back as it pours out of a sky which is so often cloudless. Yet in the shade of rocks and trees and in the ordinary life in and about a house, it is never oppressive, and there are few summer
241 evenings in Leh when an extra wrap is not needed. The
132 short summer from June to mid-September sees the ripening of the wheat, barley and lucerne crops, the coarse grained barley being the more important source of food, and growing up to altitudes of over 14,000 feet. In the lower warmer
● 317 villages the summer is longer, and a second crop may be
241 raised. All this cultivation is entirely kept alive by irrigation,

13: Heber and Heber D-3 (1914-25) 1926 AJ4 W. Tibetans AJ4

dependent on the melting of the winter snows, so that the stream from the Kardong which waters Leh is completely used up, and never reaches the Indus bed ; the average two inches of rain-fall is almost negligible. Although at such an altitude, the snowfall of Leh is also not severe, the snows exhausting themselves on the surrounding ranges, and it rarely exceeds two inches on the ground at a time. It seems to evaporate without any intermediate slushy stage and a sunny winter is quite pleasant owing to the dryness of the cold. It is even quite enjoyable to sit out-of-doors in the sunshine during the day time. Though the temperature may go down to minus ten degrees F. in mid-winter, and remain by day at about ten degrees below freezing point in a room without a fire, its dryness makes it much more bearable than a less cold, but damper climate, and for a similar reason the heat is much less oppressive than that in India, perspiration being hardly perceptible owing to swift evaporation. The spring, however, is heralded by bitter piercing winds, and often they raise little spiral hurricanes of dust seen chasing across the valley from afar, but woe if one of these " sand-devils " blows across your garden and catches up your verandah chairs in its wake or fills your room with dust.

The further effects of altitude and climate on the human beings, indigenous and foreign, who dwell in the land, need not be dealt with here, but when all is said, the flame of life on the whole burns brightly in this land of clear skies and bright sunshine.

13: Heber and Heber D-3 (1914-25) 1926 AJ4 W. Tibetans AJ4

CHAPTER XI

Domesticities

THE homes of Ladak, with the exception of those in its metropolis, Leh, and perhaps in the small town of Kargil, in Purig, are practically all village homes. In these desert uplands a village must centre round a stream, which brings its contribution from the glaciers of the great heights—ever in the background—to one of the smaller rivers, most of which eventually flow into the Indus. Where such a stream runs through a broadening valley, it is possible to lay out a series of terraced fields, which can be irrigated in turn by directing the supply into small artificial water-courses. Indeed the turns for sharing the precious water are often the subject of much quarrelling, hoarse shouting and invective, while some less fortunate inhabitants have sometimes to stay up all night to water their fields. Above the area of cultivated terraces, and at the foot of the actual hills, where it is too rocky and steep to plough and sow, the houses are clustered, approached by stony paths or tracks, and so built into the hillside that convenient pieces of rock are often used for wall or floor, and, where the rock overhangs, even for roof, while a little sunny platform will be enclosed with a rough wall to stable the animals by day in winter. The setting of roof and balcony is always arranged to catch the maximum sunshine, so that even in the low temperatures of winter, many domestic activities can be carried on out-of-doors. Crowning the chief hill of the village, and dominating its common life, as its position would suggest, is the monastery.

19: Asboe M-3 (no date) 1937 AJ4 W. Tibetans AJ4 Lahul

241 787 before a verdict as to the propitious moment for beginning such occupations is given by the hierarchy, this custom is considerably relaxed in Lahoul, where the community does not pay so much attention to the priestly oracle as do the people living in the more remote valleys of Western Tibet.

Landmarks.

423 685 691 Rocks, stones and watercourses serve as landmarks to distinguish between the various farm holdings. When disputes occur, arising out of the removing of rock or stone landmarks, a subordinate in the Government survey department is called in to remeasure the land which is under dispute, and legal proceedings are taken by the offended party.

Virgin Soil.

425 [273] When a farmer contemplates cultivating virgin soil, he has first of all to consult the wishes of the community, lest he should infringe the rights of communal pasturage, before negotiating with the Government authorities under whose administration he lives. If the community is agreed that there is no encroachment on the pasturage, a beer drinking party for all concerned is arranged at the expense of the farmer, who may then proceed to acquire the prospective piece of waste land from the Government.

Regulation of Water Supply.

312 624 An adequate supply of water from rivers, glaciers and accumulations of snow is essential in a practically rainless country such as Western Tibet is. Hence the community is most jealous in protecting its rights over such water supply. Two men (Las-pa) are chosen in rotation yearly by the villagers to supervise the communal water supply.

Their duties consist of (1) calling the villagers when the watercourse has to be repaired, (2) collecting beer from each household for the nourishment of about 14 people engaged in the repairs.

In Ladakh the watchers of the water supply are called 'Choo-spon' (lit. Master of the water supply). In cases where there is a communal reservoir for collecting water for the fields, the 'Choo-spons' (usually two or three men) allot the amount of water for each farmstead, and so prevent the possibility of one farmer stealing more water than is his rightful share.

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Arrangement of Fields.

Owing to the mountainous nature of the

19: Asboe M-3 (no date)1937 AJ4 W. Tibetans AJ4
Lahul

country, the fields are arranged in terraces, and irrigated by watercourses cut in fan-like formation from a river, mountain torrent, or from glaciers and large accumulations of snow.

Size of a Farmstead.

The extent of a man's fields is popularly computed in terms of a yoke of oxen (dzo-ldor), or in a dry measure called a 'Kal' (40 lb.) of seed. Thus if one asks a peasant how large is his arable land, he will reply that he possesses land sufficient to plough with one or two yoke of oxen (dzo-ldor) as the case may be, or he may say that his land requires 2 'Kals' (80 lb.) of seed to sow it. It takes one yoke of oxen to plough a field requiring 1 kal of seed to sow it. Computed in terms of Indian survey measurement, this extent of land would be two 'bigars.'

The average amount of land possessed by a single farmer is that which can be ploughed by one yoke of oxen in four days, therefore requiring 4 kals (160 lb.) of seed. The average yield in a good year for each kal of seed sown is tenfold.

Lha-zhing (Field belonging to a God).

Dispersed throughout the country are fields which from ancient times belong to a local god (Lha-zhing). These are cultivated by the peasants who, at the Buddhist new year (February), and again in May when ploughing begins, have to regale the bearer of the wood image of that god with beer and one measure of barley. The cultivator of these fields may, however, reserve the harvest for his own use.

Alternation of Crops.

Barley is sown two years successively, and the land is manured on the previous autumn or spring. On the third year a crop of wheat is grown, the land being similarly treated with manure. On the fourth year buckwheat is sown, but this does not require manure. Then on the fifth year barley is again sown, and so on.

Barley, wheat and buckwheat have been grown for an indefinitely long time, and are indigenous crops, but during the past fifty years rye has been cultivated with marked success. This was introduced by the Moravian mission operating in this country, as also were potatoes, vegetables and fruit trees.

Sometimes an insect destroys the barley soon after it is sown, in which case the people water the unproductive field and then sow more seed by loosening the soil with a small implement like a hoe with a short handle (surmo).

22: Francke M-3 (no date) 1901 AJ4 W. Tibetans AJ4

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(*c*) The time when the fly turns [flies] round the mouth, is the time of taking off all clothing and eating everything.

(*d*) A description of summer in the peasant's calendar.

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(*e*) About *kha* instead of *khala* see 1 (*e*). If an *r* follows a muta, the muta is often dropped in Ladakhi, thus *rang* is said instead of *brang*; *ci* 'what' is used here in the sense of whatever.

539 8. (*a*) མཁར་རྫོང་ཡ་ཆུལ་ལྟ་ལྟ།
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392 ● ཆུ་སྦིའི་ལྡམ་ཆུ་ཡང་བདུད།

(*b*) khar'zongi yachula lta'lta,
chu'bii ldam'chu yang bud'.

(*c*) Whilst looking at the glacier water of the Kharzong pass the gathered water of Chubi (a village) is also lost.

(*d*) take what is nearest!

(*e*) refers to the system of irrigation. Notice the re-duplication of the verb, implying a durative sense = whilst.

577 9. (*a*) རྨ་མའི་ཐྲོ་ལ་གོ་བ། ལུག་གི་ཐྲོ་ལ་བེ་ཡ།།
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(*b*) ra'mä thro'a go'a, lug'gi thro'abe'a.

(*c*) In the company of goats [he says] *goa*, in the company of sheep [he says] *bea*.

(*d*) Said of a man, who has no will of his own,

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(*e*) *Goa* and *bea* imitate the voices of goats and sheep respectively.

539 10. (*a*) དཔིད་བབད་དུས། སྟོན་རྩུ་དས།།
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(*b*) spid'bad'dus' ston'rdu'dus'.

(*c*) Spring is the time of working, autumn the time of gathering.

(*d*) Do everything at the proper season.

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(*e*) The two sentences consist each of a three-syllabled *Comps. determ.*

539 11. (*a*) དཔིད་བབད་དུསལ་མ་བབད་ན། སྟོན་རྩུསལ་ལ་གྱོད་འདུག།།
132
577

(*b*) spid' baddusla mabad'na, ston'rdudusla gyod'dug.

(*c*) If you do not work in the spring working time, you will repent in the autumn gathering time.

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(*e*) Notice the change of *s* into *r* in *rdu* = gather.

24:Peter E-5 (1938)1963 AJ4 West Tibetans AJ4
Lahul

neighbouring Chamba, eventually to join up with the Indus basin in the plains. The valleys formed by the Chandra and the Bhaga constitute the inhabited part of Lahul, as does also the valley of their united Chandra-Bhaga course. Running towards the north, and springing also from the Baralacha pass, from a lake between the sources of the two other rivers, is the Yunan river, which joins up with the Tsarab Chu (*Ch'hu*, "water", "river" in Tibetan) in Spiti.

This hydrographic system of the Chandra-Bhaga or upper Chenab, which constitutes Lahul, is bordered to the north by Zangskar in Kashmir, to the east by Spiti, to the south by Kulu, Bara Bangahal and Barhmor, and to the west by Chamba-Lahul. All these non-Kashmiri areas were formerly part of the Punjab (Chamba was one of its princely states), but have now all been included in the new State of Himachal Pradesh.

The entire region is a high altitude one, the ranges north and south rising to a mean elevation of 18,000 feet; the lowest point is the Rothang pass in the mid-Himalayan range, and the highest peaks are well over 21,000 feet. The Chandra-Bhaga river, later to became the Chenab, does not flow below 9,000 feet at its exit from Lahul into Chamba. Kyelang is approximately at a height of 10,000 feet.

In consequence of the altitude the climate is a cold one. The mean annual temperature in the capital is only 43.3° F. with the coldest average temperature in February (23.° F.) and the highest in July-August (61.7° F.). The rainfall is scanty, reaching only six inches during the monsoon season in India from June to September. There is more rain in the winter months due to storms of high elevation; these bring the annual rainfall at Kyelang up to 23.08 inches for the whole year. For this reason agriculture has to make use of irrigation, but as there is plenty of perennial water from glaciers and from melting snow, this is rather an advantage to cultivation.

The scenery of Lahul is one of grandeur and it is impossible not to be impressed by the towering, snow-capped peaks, the bleak upper slopes of the mountains, the green pastures dotted with flocks of sheep in the summer, the poplar groves lower down fringing the flat, terraced fields of both food and cash crops, and the small villages of closely packed houses, flat-roofed and of an earthen colour, already very like the typical architecture of Tibet. This is the scene which meets the eye when the traveller is following the river bank in one of the valleys. When these are left behind, and the colder air starts blowing down from the heights, the vegetation becomes rare, and very soon ice and snow fields are reached, even in the summer, before crossing one of the high altitude passes.

1; Drew G-3 (1862-1872) 1875 AV1 Kashmir
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we do not in our route to Leh follow it so far, but turn round a corner to the right, and take to the valley of the Surū River (one of about equal volume with that from Drās), passing here round a rock that the road has very imperfectly been cut in, so that in places the roadway has had to be constructed of poles lodged in projections of the cliff; these are loosely covered with slabs. In a few miles after this we come to the collection of villages which bear the name of Kargil.

At Kargil is another of the wider openings between the hills; up to this spot the granitic hills had continued—bare, rocky, and lofty; but now on the east there appear lower hills of a softer material, alternating beds of clay and sandstone. Between the Pāskim stream and the Surū River is an alluvial expanse of some square miles, a succession of terraces of alluvial gravel. These plains are uncultivated; hitherto the work necessary for bringing the water of the Pāskim stream on to the lower wide terrace, though once or twice commenced, has not been successfully accomplished; but narrow strips not very high above the two streams are watered by small canals led from them.

The villages here are about 8900 feet above the sea; partly from this somewhat less altitude as compared with Drās, and partly from the place being less in the way of the comparatively moist air that steals into this country through the Drās Pass, there is both less snow in winter and a greater force of sun and warmth in summer to help on vegetation. Here wheat flourishes as well as barley; but the great difference to be observed was the growth of many fruit-trees (chiefly mulberry and apricot), as well as willows and poplars, along the watercourses that are led over the terraced fields. Such villages as we now see are narrow strips of ground, artificially banked and levelled into still narrower terrace-fields, and backed by great rocks that with a favourable aspect reflect the heat and act almost like the walls of our fruit-gardens. They are richly carpeted with heavy-eared crops and crowded with fruit-trees, the bright greenness of whose leaves delights the eye of the traveller, who for many miles has wearied under the sameness of gazing at nothing but rock and loosened stones, and the shade

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it cannot be seen from the road. On our way we pass Thārū, a collection of eight or ten houses, with corresponding cultivation; then we cross the last of the plateaus, from which descending we reach a little garden planted by the roadside for the shelter of travellers, which is close to the village of Phayāng. Thence a few miles by the side of the river brought us to Pitak, the last village before Leh. 133x 361 [485]

All the cultivated spots hitherto met with in Ladākh were watered from side-streams—streams coming almost immediately from the mountains with a more or less steep fall. But at Pitak the land is irrigated from the Indus itself. For we are here at the beginning of a part of the Indus Valley, where the bottom is wide and is occupied by a flat of alluvium, over which the waters of the main stream can be brought. 312 138x

At Pitak there is an isolated rock a few hundred feet high, on which all the older buildings are situated. The monastery is on the summit at one end, and there is a fortification—of two towers connected by a double wall—that must have helped to make the rock a strong position. Formerly all the houses were, for protection's sake, built thus high up; this was very commonly the case throughout Ladākh, only in the last generation or so have the people taken generally to building in the plain. 361 792 712

We are now but five miles from Leh, the capital; it is indeed within sight from the summit of the rock; let us from here take a general view of the geographical position of that town.

The river is 10,500 feet above the sea; it is flowing with a gentle current in a flat, the surface of which is in great part of pebbles only, but here and there it is of such a fine alluvial soil that the people have been able to bring it under cultivation. On the south-west side this low flat is bordered by a stretch of sloping gravelly ground, consisting of a number of coalesced fans that have been deposited by streams having their origin in the mountains on the south—mountains which rise up to 20,000 feet. On the north-east of the river there continues the same great granite ridge, at the foot of which we have been passing; the summit of it is about 12 miles from the Indus, as the crow flies. 133x

I: Drew G-3 (1862-1872)1875 AV: Kashmir
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from the ground, while the pent-up air itself becomes hot and gives no relief. But after a toilsome drag for some miles over this waste of heated rocks, he reaches one of the little villages that are made at the mouths of side ravines, if haply there can be found a few acres of flat ground for cultivation. These villages are to the traveller a most welcome and lovely sight; a space covered with crops of a brilliant green overshadowed by luxuriant fruit-trees in the midst of the barest rocks gives a relief equally to the eye, the mind, and the body of the wayfarer.

Garkon is the one of these villages most curious in its situation. It consists of very narrow strips or ledges of flat watered ground, between separate stages of a great river-cliff, so that on one side there is a precipitous fall of ground while on the other vertical cliffs overhanging the narrow fields, which, receiving their radiated heat, quickly ripen the crops; even at night the place does not lose its heat. Water is led over the fields from a ravine that comes from the high mountains. Apple-trees, apricot, mulberry, and the vine are cultivated, in company with the cereals, on the narrow space, and flourish well with the combination of moisture and warmth. In going from Garkon to the next village, called *Dāh*, we have passed from Baltistān into Ladākh. The Baltīs were in former times apt to make raids upon their more peaceable neighbours. Dāh, as the frontier village, protected itself by the agglomeration of its houses together to form a sort of fort; on two sides protection is given by a steep cliff, on two by a wall, with a good tower to guard the entrance to the enclosure. Now that all are under one government, and perfect peace has ensued, the dwellings are scattered; but still in winter time the people from the outlying houses and hamlets join to live within the enclosure, for warmth and for mirth's sake. Within its walls the ground is almost all roofed over, hardly any space is left for alleys, passages from one house to another are led beneath the rooms of a third; the whole is a strange crowding together of hovels. In this part side valleys of various degrees of importance reach down to the Indus; some are mere rocky ravines, others hold hamlets and villages. I visited the *Hanū*

2: Gervis T-3 (no date) 1954 AV1 Kashmir AVI
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die, and I have no reason to disbelieve this. One of the difficulties is that there is practically no rainfall in this land either in summer or winter. Water comes from the snows, these feed the rivers, but much of the snow simply evaporates at this height; the mountains are arid; among the rocks bushes occasionally grow which carry few leaves on their green twigs, but sufficient to feed the wild goats. The only sign of vegetation is either along the river banks or in the nullahs and protected valleys through which the snow waters flow for a while and which do not take the glare of the sun which pours with great power through the clear air. From above it appears as if a giant flame-thrower has scorched the earth, which in different parts takes on all the colours of a burned brick, and in its destruction has missed those valleys tucked away. All around us were giant chocolate-coloured rock cliffs which hold the snow deep during the winter months, and permit the sun to shine for but a few hours on the small village.

Dras—known by the Tibetans as Hembas—seems to be not one but a number of villages spread over a quite fertile undulating valley which is enclosed within a ring of hills but at a height of ten thousand feet and so placed that the bitter winter winds sweep down on it. When we were there the clumps of willows were green with young leaves and they told us that by by the time we returned the skylarks would have come from Kashmir.

Oddly enough there are a few European-style houses standing in their own gardens, and a rest house of similar design, built with a high pitched roof and tall chimneys, but looking strange, for it was without the verandahs which one has become so used to in India and Kashmir. The sand and dust gets in through all the cracks, in winter it is carried there by the icy blast, yet it must be a comfortable haven to those who are stranded there.

The valley narrows as one goes on past small fields which would appear to have been scratched out from the rock-covered surface of the ground; I can well remember being shown by a proud "farmer"—the father of one of the horsemen who came the whole way with us—a large patch scattered with stones as big as my fist, in which surely not more than a thousand green spears of barley had just come through. Anywhere else the sowing